

Title (en)

MEDICAL DEVICE FOR IMPROVING ENVIRONMENTAL PERCEPTION FOR BLIND OR VISUALLY IMPAIRED USERS

Title (de)

MEDIZINPRODUKT ZUR VERBESSERUNG DER UMGEBUNGSWAHRNEHMUNG FÜR BLINDE ODER SEHBEHINDERTE BENUTZER

Title (fr)

DISPOSITIF MÉDICAL D'AIDE À LA PERCEPTION D'ENVIRONNEMENT POUR DES UTILISATEURS AVEUGLES OU MALVOYANTS

Publication

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Application

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Abstract (en)

[origin: WO2020128173A1] The present invention relates to a device for improving environmental perception for blind or visually impaired users, comprising: - a set of mechanical actuators (3) intended to be in contact with the skin of a user, - at least one digital camera (6) designed to acquire a current digital image of an environment facing the user, - a processing circuit (2) connected to the camera for receiving pixel signals from the acquired digital image and converting at least one portion of the pixel signals into control signals, each of which powers a mechanical actuator of the set of actuators, - an eye-tracking module for tracking (7) each eye of the user to identify a gaze direction of the user. The processing circuit then selects, in the environment filmed by the camera (6), an area of acquired current image which is a function of the gaze direction and converts the pixel signals of said area into control signals, each of which powers an actuator of the set (3) to stimulate the user's skin.

IPC 8 full level

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